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| APPLICATION NO.         | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|-------------|----------------------|---------------------|------------------|
| 10/080,927              | 02/25/2002  | Atsushi Hisano       | 040281-0122         | 7787             |
| 22428                   | 7590        | 05/20/2004           | EXAMINER            |                  |
|                         |             |                      | LEE, BENJAMIN C     |                  |
|                         |             |                      | ART UNIT            | PAPER NUMBER     |
|                         |             |                      | 2632                |                  |
| DATE MAILED: 05/20/2004 |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/080,927             | HISANO, ATSUSHI     |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Benjamin C. Lee        | 2632                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 18 June 2002.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### **Claim Status**

1. Claims 1-8 are pending.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolley et al. (US pat. #5,892,441) in view of Joao (US pat. #6,917,405).

1) In considering claims 1-2:

a) Woolley et al. teaches a detection system for object monitoring comprising one or more communication devices (15) each having a wireless communication capability to communicate with a plurality of communication nodes (16(1-n)); an information collecting means (13) to collect an information of communication nodes distribution, which was received by said communication device (Figs. 1, 23, 25, 29-31, and 34-69; col. 31, line 40 to col. 32, line 16, whereby communication nodes distribution in the form of communication nodes inter-distances, location, topography, hierarch, and their corresponding *changes* are monitored); while

b) Joao teaches that the detected status information of nodes distribution when applied to an object can be used to detect an object status for surveillance by using a status information generating means to generate a status information of the object from collected information of nodes distribution in indicate changes in the object status (e.g. generating a status information on

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the object's physical/structural alterations, according to Fig. 10; col. 9, lines 13-21 and col. 45, lines 22-60), including using an initial status recording means to record the status information generated by said status information generating means as an initial status information, and a comparison means compare a current status information generated by said status information generating means with said initial status information obtained from said initial status recording means for outputting the comparison result (col. 45, lines 35-44).

In view of the teachings by Woolley et al. and Joao, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the communication nodes distribution information that is indicative of changes in the nodes location and/or physical distribution in a system such as taught by Woolley et al. constitutes nodes distribution information and corresponding changes, and therefore can be applied to an object for the detection of physical alteration of the object to detect object status such as taught by Joao.

2) In considering claim 3, Woolley et al. and Joao made obvious all of the claimed subject matter as in the consideration of claims 1-2 above, including:

a) the claimed remote center is met by "Operations Center 13" of Woolley et al.;  
b) the claimed registration means to send and register said status information of said object as a characteristic information which represents said object status and recorded in a status recording means is met by the initial status information recording considered in claims 1-2;

and furthermore:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that for an object to be protected having an interior such that one or more components of the physical alteration detecting system can be placed in the object, such as the "vehicle" of

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Joao, in a system such as taught by Woolley et al. and Joao, the initial status information defined by the initial communication nodes distribution information detected at the site of the object can be placed/stored in a status recording means provided in the object before sending over to the remote center.

3) In considering claim 4, Woolley et al. and Joao made obvious all of the claimed subject matter as in the consideration of claims 1-3 above, including:

--the claimed each communication node generating a cost data for conveying a message to the other nodes by communicating with neighboring nodes by a self-organizing network using cost data collecting means, whereby the status generating means generate the status information of the object by said cost data of each communication node is met by Figs. 52-62 of Woolley et al.

4) In considering claims 5-6, Woolley et al. and Joao made obvious all of the claimed subject matter as in the consideration of claims 1-4 above.

5) In considering claim 7, Woolley et al. and Joao made obvious all of the claimed subject matter as in the consideration of claims 1-4 above, including:

--the claimed abnormal detection means is met by the physical/structural alternation detection (dismantling, etc.) of Joao.

6) In considering claim 8, Woolley et al. and Joao made obvious all of the claimed subject matter as in the consideration of claims 1-3 above, including:

a) the claimed position data collecting means to collect a position data of each communication node detected from said communication device, and the space position recording means (col. 31, lines 39-67 of Woolley et al. and col. 45, lines 35-44 of Joao);

except:

b) the claimed time information in the recording in time array corresponding to said position data.

However, since the position change detection is determined by comparison of recorded initial position at an initial time for comparison to position data at a later time in a system such as taught by Woolley et al. and Joao for detection of an object's physical/structural alteration *event*, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include time data corresponding to the position data in the recording in a time array to distinguish the time sequence of the data as initial and later time data, and/or to provide more detail of the event or better evidence of the event by inclusion of the time data.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US pat. #s 5831260, 6141293, 6614350, 6577238, 5826578, 6002334, 6487516, 5289559

--Similar object status monitoring systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (703) 306-4223. The examiner can normally be reached on Mon -Fri 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Benjamin C. Lee  
Primary Examiner  
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B.L.  
5/14/04